(ii) a drug, a toxin, an immunomodulator, a chelator, a boron compound, a photoactive agent or dye, or a radioisotope, wherein said radioisotope is other than ^{131}I.

25. The method according to claim 24; wherein the immunoconjugate comprises a chemotherapeutic drug.

26. The method according to claim 25, wherein the chemotherapeutic drug is selected from the group consisting of cyclophosphamide, etoposide, vincristine, procarbazine, prednisone, carmustine, doxorubicin, methotrexate, bleomycin, dexamethasone, phenyl butyrate, bryostatin-1 and leucovorin.

27. The method according to claim 25, wherein the chemotherapeutic drug is selected from the group consisting of nitrogen mustards, alkyl sulfonates, nitrosoureas, triazenes, folic acid analogs, pyrimidine analogs, purine analogs, antibiotics, epipodophyllotoxins, platinum coordination complexes, and hormones.

28. The method according to claim 24, wherein the immunoconjugate comprises a toxin.

29. The method according to claim 28, wherein the toxin is selected from the group consisting of ricin, abrin, ribonuclease, DNase I, *Staphylococcal* enterotoxin-A, pokeweed antiviral protein, gelonin, diphtherin toxin, *Pseudomonas* exotoxin, and *Pseudomonas* endotoxin.

30. The method according to claim 24, wherein the immunoconjugate comprises a boron compound.

31. The method according to claim 24, wherein the immunoconjugate comprises a photoactive agent or dye.

32. The method according to claim 31, wherein the photoactive agent or dye is a fluorescent agent.

33. The method according to claim 31, wherein the photoactive agent or dye is a porphyrin.

34. The method according to claim 24, wherein the therapeutic composition comprises an immunomodulator.

35. The method according to claim 34, wherein the immunomodulator is selected from the group consisting of G-CSF, GM-CSF, thrombopoietin, IL-1, IL-3, and IL-12.

36. The method according to claim 25, wherein the anti-CD22 antibody or fragment thereof is a human antibody or antibody fragment.

37. The method according to claim 25, wherein the anti-CD22 antibody or antibody fragment is a humanized antibody or antibody fragment.

38. The method according to claim 25, wherein the anti-CD22 antibody or antibody fragment is a chimeric antibody or antibody fragment.

39. The method according to claim 25, wherein the anti-CD22 antibody or fragment thereof comprises a multivalent fusion protein that additionally comprises at least one antibody component that binds with CD19, CD20, CD52 or CD74.

40. The method according to claim 39, wherein the anti-CD22 antibody or fragment thereof comprises a trivalent fusion protein.

41. The method according to claim 39, wherein the anti-CD22 antibody or fragment thereof comprises a tetravalent fusion protein.

42. The method according to claim 39, wherein the anti-CD22 antibody or fragment thereof comprises a quintavalent fusion protein.

43. The method according to claim 24, wherein the immunoconjugate comprises polyethyleneglycol to extend the half-life of the antibody or fragment thereof, in blood, lymph, or other extracellular fluids.

44. The method according to claim 24, wherein the anti-CD22 antibody or antibody fragment is a human antibody or antibody fragment.

45. The method according to claim 24, wherein the anti-CD22 antibody or antibody fragment is a single chain Fv antibody fragment comprising V_H and V_L chains are connected by a peptide linker.

46. The method according to claim 24, wherein the anti-CD22 antibody or antibody fragment is a $F(ab')_2$, Fab' or Fab antibody fragment.

47. The method according to claim 24, wherein the therapeutic composition comprises at least two monoclonal antibodies that bind with distinct CD22 epitopes, wherein the CD22 epitopes are selected from the group consisting of epitope A, epitope B, epitope C, epitope D and epitope E.

48. The method according to claim 24, wherein the therapeutic composition additionally comprises at least one antibody component that binds with CD19, CD20, CD52 or CD74.

49. The method according to claim 24, wherein the antibody component is a naked antibody.

50. The method according to claim 49, wherein the antibody component is anti-CD20.

51. The method according to claim 24, wherein the anti-CD22 immunoconjugate comprises a radioisotope other than ^{131}I.

52. The method according to claim 50, wherein the radioisotope is selected from the group consisting of ^{198}Au, ^{32}P, ^{125}I, ^{90}Y, ^{186}Re, ^{188}Re, ^{67}Cu, ^{211}At, ^{213}Bi, and ^{224}Ac.

53. The method according to claim 52, wherein the anti-CD22 immunoconjugate is used in combination with an anti-CD20 antibody.

54. The method according to claim 53, wherein the anti-CD20 antibody is a naked anti-CD20 antibody.

55. The method according to claim 54, wherein the anti-CD22 immunoconjugate comprises a ^{90}Y radioisotope.

56. The method according to claim 55, wherein the ^{90}Y is attached to the anti-CD22 immunoconjugate by means of chelating agent.

57. The method according to claim 56, wherein the chelating agent is diethylenetriaminepentaacetic acid.

58. The method according to claim 38, wherein the radioisotope is ^{67}Cu.

59. The method according to claim 58, wherein the chelating agent is p-bromoacetamido-benzyl-tetraethylaminetetraacetic acid.

60. A method for treating a subject having a B-cell malignancy, comprising administering to the subject a therapeutic composition comprising a pharmaceutically acceptable carrier, and an immunoconjugate, wherein the immunoconjugate comprises

(i) at least one anti-CD22 antibody or a fragment thereof, and

(ii) a therapeutic agent selected from the group consisting of a drug, a toxin, an immunomodulator, a boron compound, a photoactive agent or dye, and a radioisotope,

wherein the therapeutic agent is attached indirectly to the anti-CD22 antibody or antibody fragment or is attached directly to the anti-CD22 antibody or antibody fragment via a free sulfhydryl group.

61. The method according to claim 60, wherein the therapeutic agent is attached indirectly to the anti-CD22 antibody or antibody fragment via an aminodextran that is attached to the anti-CD22 antibody or antibody fragment.

62. The method according to claim 61, wherein the therapeutic agent is attached indirectly to the anti-CD22 antibody or antibody fragment via a polypeptide carrier that is attached to the anti-CD22 antibody or antibody fragment.

63. The method according to claim 62, wherein the therapeutic agent is a radioisotope.

64. The method according to claim 63, wherein the radioisotope is selected from the group consisting of ^{198}Au, ^{32}P, ^{125}I, ^{131}I, ^{90}Y, ^{186}Re, ^{188}Re, ^{67}Cu, ^{211}At, ^{213}Bi, and ^{224}Ac.

65. The method according to claim 63, wherein the radioisotope is ^{131}I.

66. The method according to claim 63, wherein the radioisotope is ^{90}Y.

67. The method according to claim 60, wherein the therapeutic agent is a radioisotope that is attached indirectly to the anti-CD22 antibody or antibody fragment via a chelating agent.

68. The method according to claim 67, wherein the radioisotope is selected from the group consisting of ^{198}Au, ^{32}P, ^{125}I, ^{131}I, ^{90}Y, ^{186}Re, ^{188}Re, ^{67}Cu, ^{211}At, ^{213}Bi, and ^{224}Ac.

69. The method according to claim 68, wherein the radioisotope is ^{131}I.

70. The method according to claim 68, wherein the radioisotope is ^{90}Y.

71. The method according to claim 67, wherein the chelating agent is p-bromoacetamido-benzyl-tetraethylaminetetraacetic acid.

72. The method according to claim 71, wherein the radioisotope is ^{67}Cu.

73. The method according to claim 67, wherein the chelating agent is diethylenetriaminepentaacetic acid.

74. The method according to claim 73, wherein the radioisotope is ^{90}Y.

75. The method according to claim 70, wherein the therapeutic agent is attached directly to the anti-CD22 antibody or antibody fragment by means of a free sulfhydryl group.

76. The method according to claim 75, wherein the therapeutic agent is a radioisotope.

77. The method according to claim 76, wherein the radioisotope is selected from the group consisting of ^{198}Au, ^{32}P, ^{125}I, ^{131}I, ^{90}Y, ^{186}Re, ^{188}Re, ^{67}Cu, ^{211}At, ^{213}Bi, and ^{224}Ac.

78. The method according to claim 77, wherein the radioisotope is ^{131}I.

79. The method according to claim 77, wherein the radioisotope is ^{90}Y.

80. The method according to claim 75, wherein the therapeutic agent is attached directly to a free sulfhydryl group at the hinge region of a reduced antibody component via disulfide bond formation.

81. The method according to claim 80, wherein the therapeutic agent is a radioisotope.

82. The method according to claim 81, wherein the radioisotope is selected from the group consisting of ^{198}Au, ^{32}P, ^{125}I, ^{131}I, ^{90}Y, ^{186}Re, ^{188}Re, ^{67}Cu, ^{211}At, ^{213}Bi, and ^{224}Ac.

83. The method according to claim 82, wherein the radioisotope is ^{131}I.

84. The method according to claim 82, wherein the radioisotope is ^{90}Y.

85. The method according to claim 80, wherein the therapeutic agent is attached indirectly to the anti-CD22 antibody or antibody fragment by means of an aminodextran, a polypeptide carrier or a chelating agent that is attached to

the anti-CD22 antibody or antibody fragment through an oxidized antibody component.

86. The method according to claim 80, wherein the therapeutic agent is attached indirectly to an anti-CD22 antibody fragment via a carbohydrate moiety introduced into the light chain variable region of the antibody fragment.

87. The method according to claim 85, wherein the therapeutic agent is a radioisotope.

88. The method according to claim 87, wherein the radioisotope is ^{90}Y.

89. The method according to claim 87, wherein the radioisotope is ^{131}I.

90. The method according to claim 60, wherein the anti-CD22 antibody or fragment thereof is a human antibody or antibody fragment.

91. The method according to claim 60, wherein the anti-CD22 antibody or antibody fragment is a humanized antibody or antibody fragment.

92. The method according to claim 60, wherein the anti-CD22 antibody or antibody fragment is a chimeric antibody or antibody fragment.

93. The method according to claim 60, wherein the anti-CD22 antibody or antibody fragment is a murine antibody or antibody fragment.

94. The method according to claim 60, wherein the therapeutic agent is ^{131}I in a dose of 15 to 40 mCi.

95. The method according to claim 94, wherein the dose is 20 to 30 mCi.

96. The method according to claim 60, wherein the therapeutic agent is ^{90}Y in a dose of 10 to 30 mCi.

97. The method according to claim 96, wherein the dose is 10 to 20 mCi.